



## Fifth Annual Conference on Carbon Capture & Sequestration

### Perspectives from the Power Generation Industry on Utilizing CO<sub>2</sub> Emission Reduction Technologies: Investing and Deploying

Jeff Sterba  
Chairman, President, CEO  
PNM Resources, Inc.

May 9, 2006



# Utility industry faces mounting cost pressures and uncertainty.

## Generation Additions

- Capacity needs
- Renewable Portfolio Standards
- Environmental controls
- GHG regulations

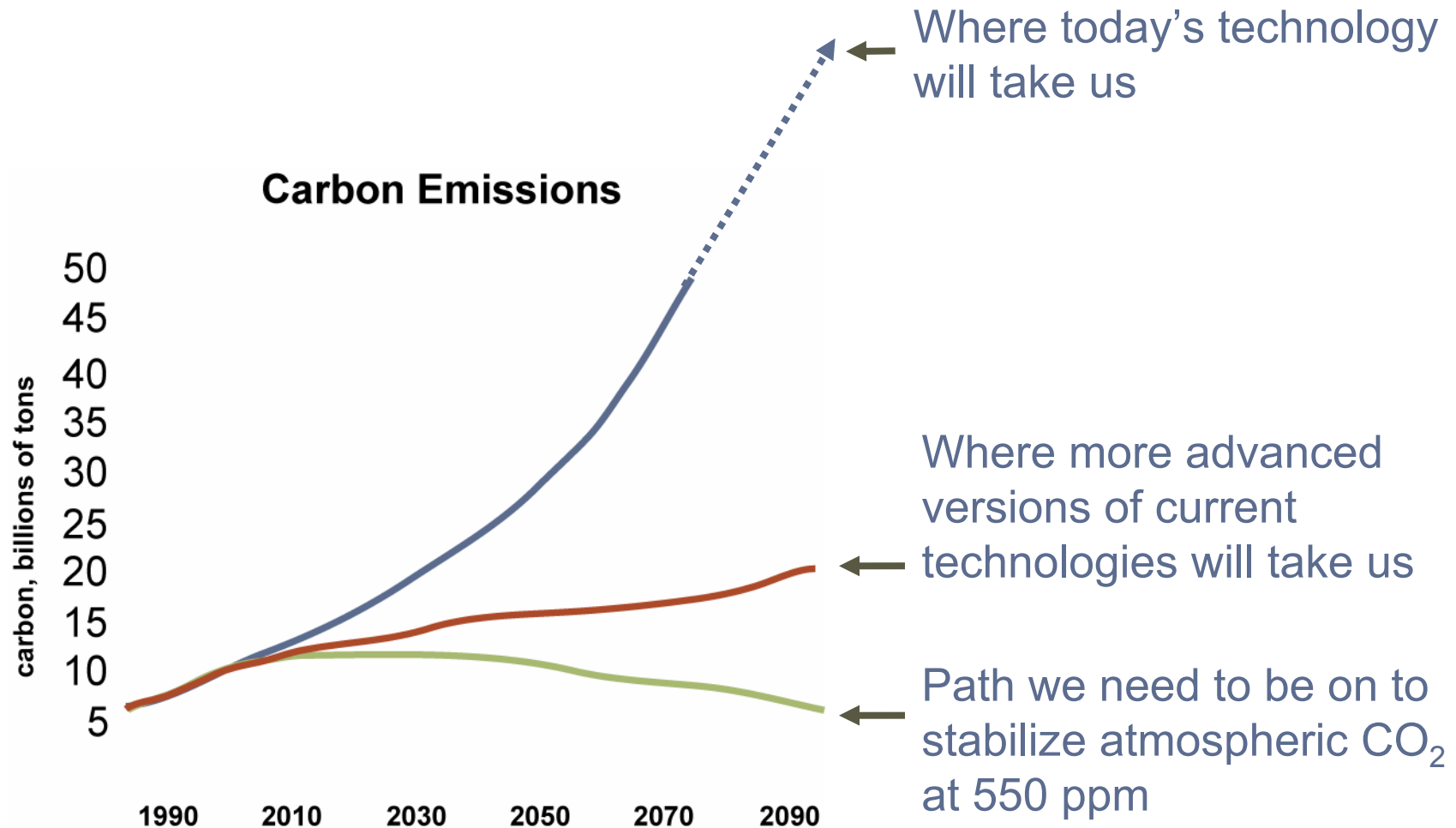
## Higher fuel costs

## Transmission expansion

# CO<sub>2</sub> is changing the way utilities think about future resources...

- Scientific community agrees that human activity is modifying the climate.
- Growing pressure to act on CO<sub>2</sub>.
- Cost implications for the electric utility sector and generation technologies are significant.
- Resource investment decisions must consider costs of climate change regulations.

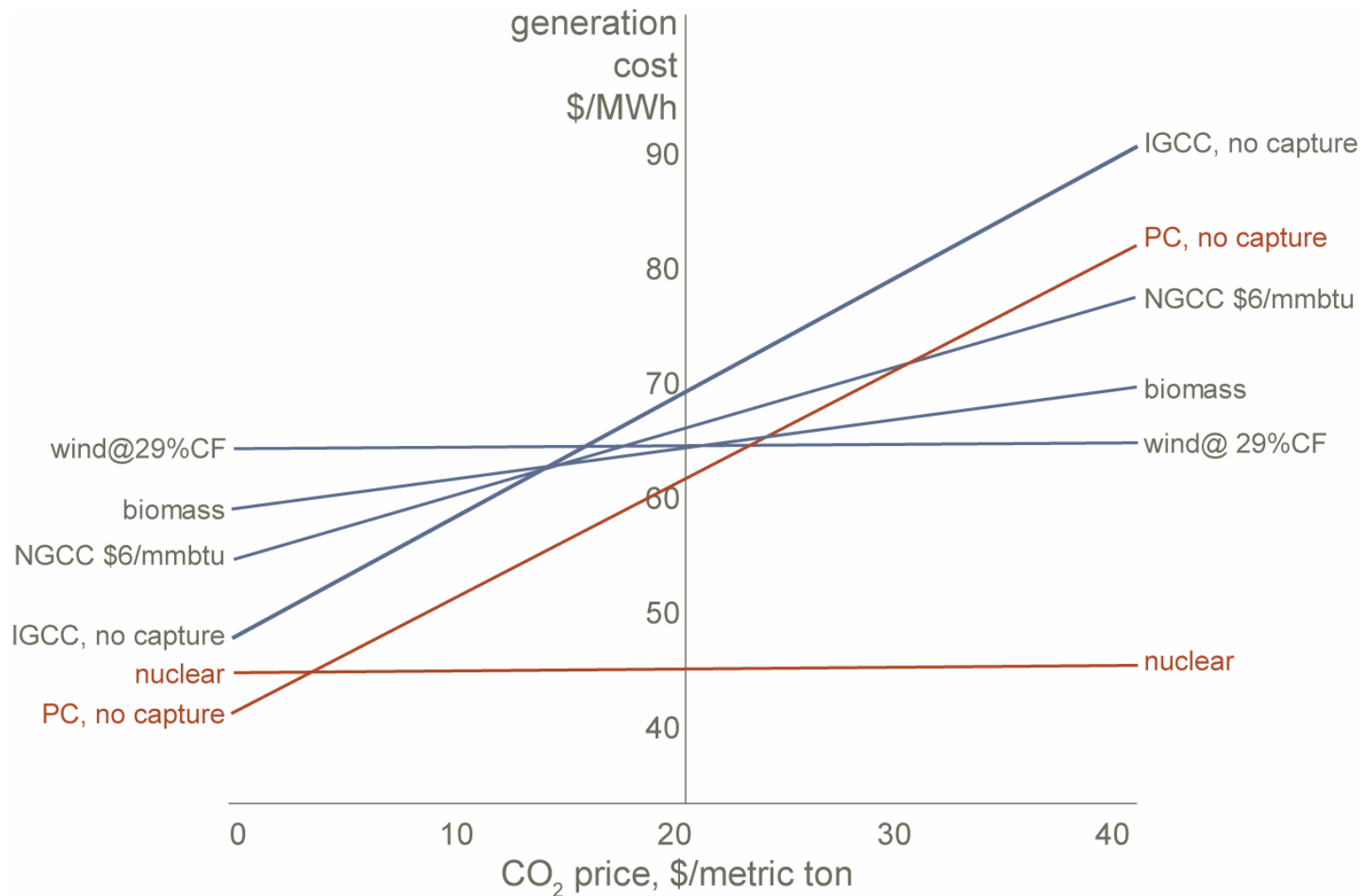
# Current technology will not get us to where we need to be...



Source: EPRI, March 2006

# Challenge of Carbon

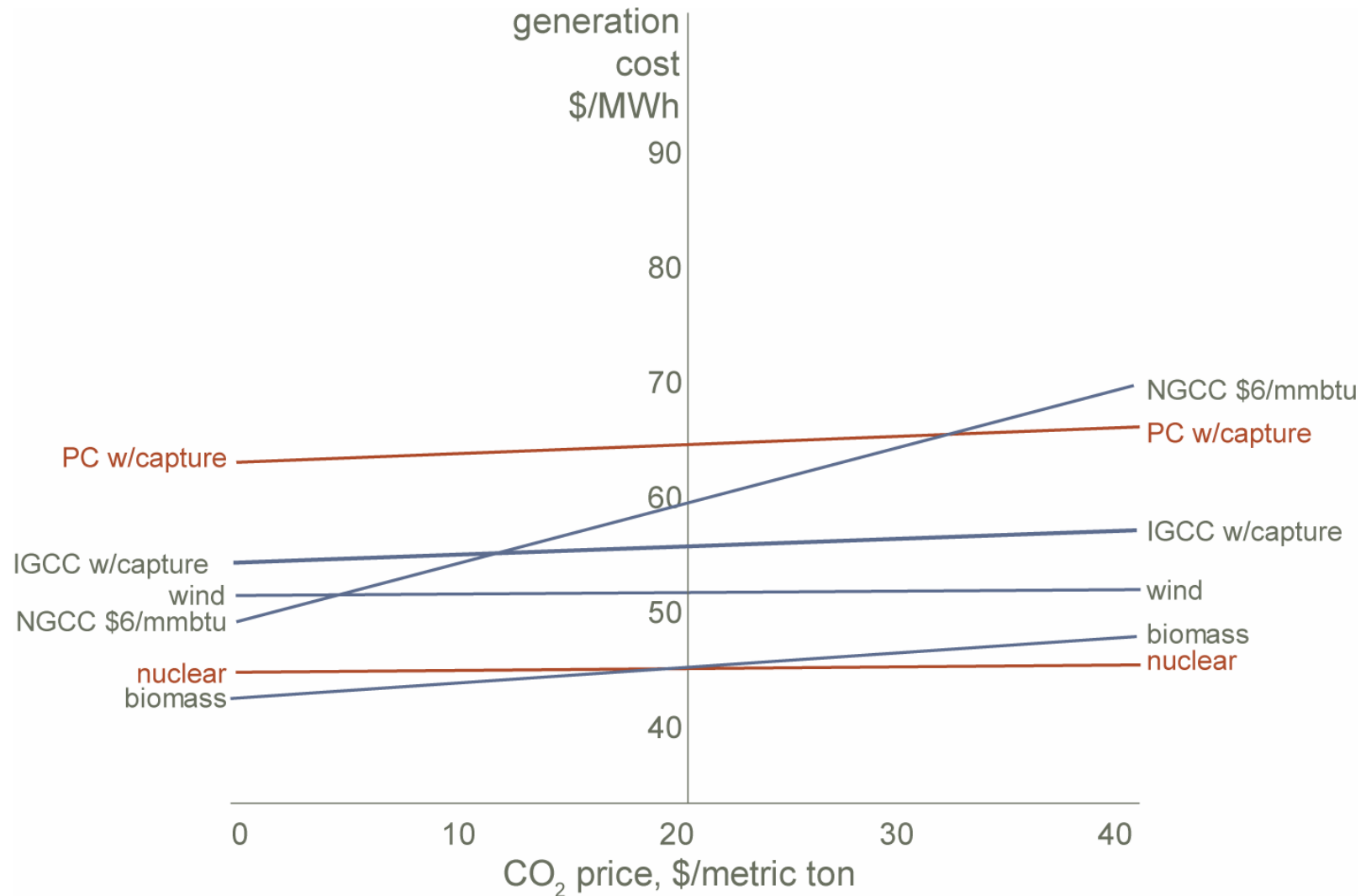
## 2010 technologies



Source: EPRI, November 2005

# Challenge of Carbon

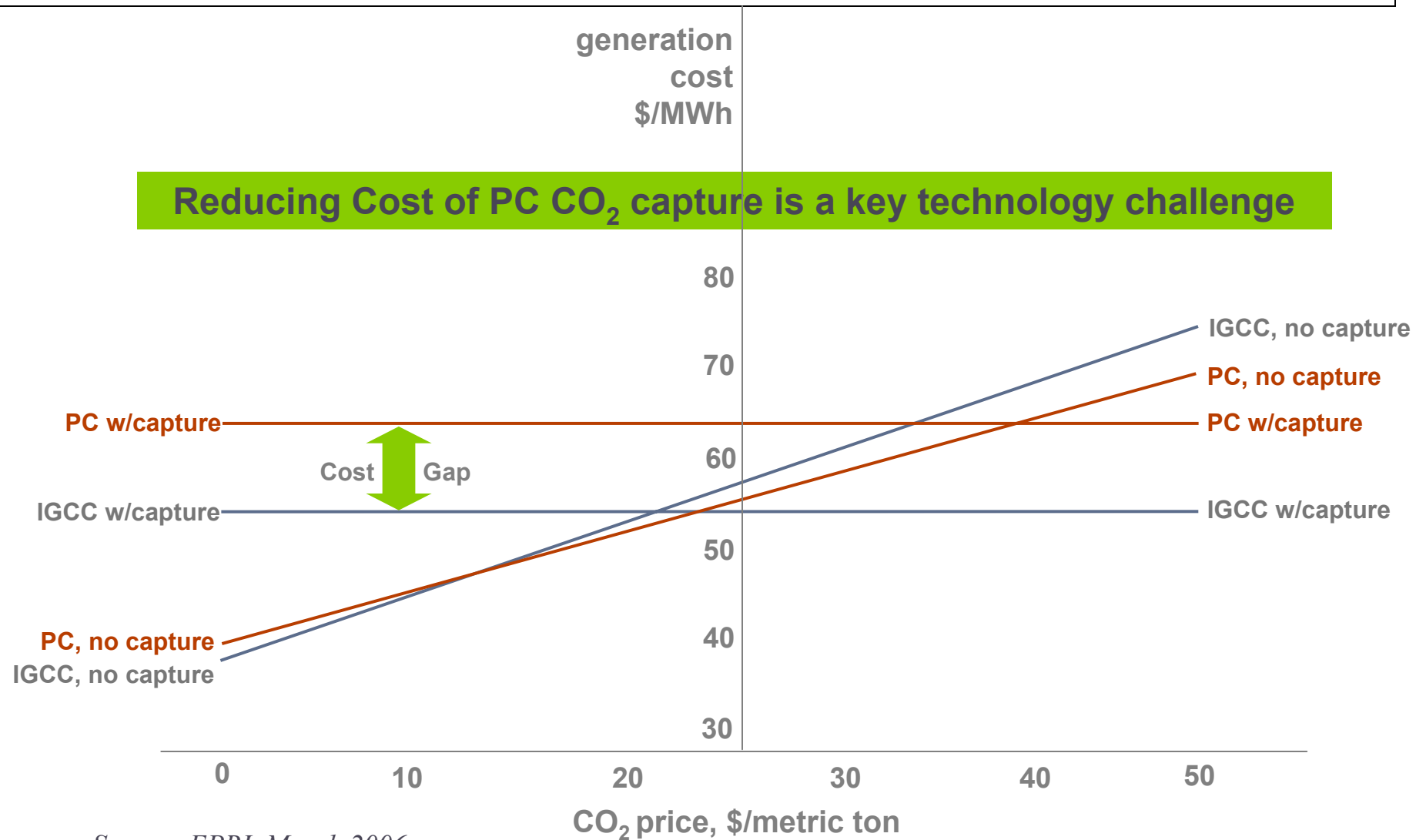
## 2020 technologies



Source: EPRI, November 2005

# IGCC and PC Comparison

2020 technologies



Source: EPRI, March 2006

# Taking the Long View – Technology is Key

- **Most utilities favor voluntary programs in the short-term, though some think regulation is appropriate**
- **Wide variety of initiatives underway, ranging from voluntary programs to investments in new technologies**
- **A 550ppm stabilization scenario suggests over 1100GW globally of fossil generation with capture operating in 2050**
- **One thing is clear: New technologies will be needed, supported by well-conceived public policies, to achieve substantial CO2 cuts under any greenhouse gas regime**
- **Mandatory targets and timetables are not sufficient without policies that support increased investment in existing and new, low- and non-emitting technologies**